

dried gel at a temperature above ambient. Near-equilibrium drying is drying under conditions near the two phase boundaries in the phase diagram at a temperature and pressure sufficient to yield to a bioactive glass with large pore structure i.e. a pore structure sufficient to yield a bioactive glass. The use of near-equilibrium drying in place of or in addition to drying under drying conditions provides for larger average pore size in the final composition and a higher rate of resorption. It is believed that near equilibrium drying reduces capillary force inside the pore structure of the gel which results in large pore size.

In contrast, Hench et al., is directed to laser dye impregnated silica sol-gel monoliths. The dye laser is prepared by immersing a highly porous consolidated silica sol-gel monolith in a solution of at least one laser dye and at least one solvent until the solution enters the pores of the monolith to a significant degree to form an impregnated silica sol-gel monolith, and then drying the impregnated silica sol-gel monolith to vaporize substantially all the solvent present within the pores of the monolith.

Hench et al., would not have suggested the present invention to one of ordinary skill in the art at the time the invention was made. Hench et al., does not discuss or address near-equilibrium drying. At best, Hench et al., describes manipulation of the time or temperature, or both, of the drying, aging, and the stabilization steps to control the microstructure of a monolith. However, Hench et al., says nothing about a near-equilibrium drying step or that a near equilibrium drying step would improve pore structure, bioactivity or resorbability of the resultant monolith.

Moreover, Hench et al., is not concerned with the preparation of a bioactive monolith. Rather, Hench et al is directed to a method for making a dye laser. Accordingly, there is no suggestion of a near equilibrium drying step that would provide for the properties of bioactivity and resorbability.

In view of the foregoing, Applicants believe they have responded to all matters raised in the above referenced Office Action and that the application is now in condition for allowance. Therefore, Applicants respectfully request withdrawal of the outstanding rejection

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and solicit a favorable action at an early date. If the Examiner has any questions concerning this Application or this Reply and Amendment, he is invited to contact the undersigned.

Respectfully submitted,

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